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Erratum

Erratum to "Static BPS black hole in 4*d* higher-spin gauge theory" [Phys. Lett. B 682 (3) (2009) 305–315]

V.E. Didenko *, M.A. Vasiliev

I.E. Tamm Department of Theoretical Physics, Lebedev Physical Institute, Leninsky prospect 53, 119991 Moscow, Russia

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The text that starts with the paragraph after (2.7) and ends at (2.9) should be replaced with:

AdS_4 possesses ten global symmetry parameters $\mathcal{K}_{AB} = \mathcal{K}_{BA}$ valued in the $o(3,2) \sim sp(4)$ Lie algebra, that satisfy

$$D_0 \mathcal{K}_{AB} = 0, \qquad D_0^2 = 0, \tag{2.8}$$

where D_0 is the AdS_4 covariant differential (e.g., $D_0 A_A = dA_A + W_{0\,A}{}^B A_B$) that squares to zero by virtue of (2.6). In terms of two-component spinors with

$$\mathcal{K}_{AB} = \begin{pmatrix} \lambda^{-1} \varkappa_{\alpha\beta} & v_{\alpha\dot\beta} \\ v_{\beta\dot\alpha} & \lambda^{-1} \bar\varkappa_{\dot\alpha} \end{pmatrix}, \tag{2.9}$$

Above (2.11) in terms of K_{AB} should be replaced with: in terms of $\mathcal{K}_{AB}$.

Paragraph in between (2.13) and (2.15) should be replaced with:

A type of the BH (e.g., whether it is rotating or static) depends on the values of $sp(4)$ invariants associated with $\mathcal{K}^{AB}$. The static case is characterized by the condition

$$\mathcal{K}_A{}^B \mathcal{K}_B{}^C = -\delta_A{}^C \tag{2.14}$$

equivalent to

$$\lambda^{-2} \varkappa^2 + v^2 = 1, \quad \varkappa^2 = \bar\varkappa^2, \quad \bar\varkappa_{\dot\alpha}{}^{\dot\gamma} v_{\beta\dot\gamma} + v^{\gamma}{}_{\dot\alpha} \varkappa_{\gamma\beta} = 0. \tag{2.15}$$

It is also convenient to use

$$K_{AB} = i \mathcal{K}_{AB}.$$

Throughout the paper $\delta(y)$ and $\delta(z)$ should be understood as $2\pi\delta(y)$ and $2\pi\delta(z)$.

Formula (4.3) should read as

$$F_K = 4 \exp\left(\frac{1}{2} K_{AB} Y^A Y^B\right),$$

correspondingly r.h.s.'s of Eqs. (4.5), (4.6), (4.7) and (5.30) should contain an additional factor of 4.

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* Corresponding author.
E-mail address: didenko@lpi.ru (V.E. Didenko).

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